

Contents lists available at [ScienceDirect](http://ScienceDirect)

## International Journal of Africa Nursing Sciences

journal homepage: [www.elsevier.com/locate/ijans](http://www.elsevier.com/locate/ijans)

## Ghanaian nurses' emigration intentions: The role of workplace violence



Isaac Mensah Bofo

Department of Sociology, University of Ghana, Legon, Accra, Ghana

## ARTICLE INFO

## Article history:

Received 17 April 2016

Received in revised form 1 September 2016

Accepted 1 November 2016

Available online 2 November 2016

## Keywords:

Emigration intentions

Workplace violence

Nurses

Ghana

Health sector

## ABSTRACT

A cross-sectional study was conducted in Ghana to examine the impact of workplace violence on nurses' emigration intentions from 2013 to 14. A combination of purposive and random sampling techniques was used to select 12 public hospitals and 592 professional nurses. The results showed that 48.9% of the participants had emigration intentions. Junior nurses were 2.8 times more likely to have emigration intentions compared to senior nurses, and those who experienced violence were also more likely than their counterparts who were not involved in such incidents (physical 2.1 times; verbally abused 1.8 times and sexually harassed 2.4 times) to have intentions to emigrate. Binary logistic regression showed that workplace violence is a significant predictor of nurses' emigration intentions. These results reiterate the need for pragmatic measures to curb workplace violence against nurses.

© 2016 The Author. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

The migration of nurses, particularly from low and middle income countries to high income countries, has become an issue of global concern. The recruitment practices of many of these low and middle income countries, especially African countries are worsening as they are unable to retain the number of nurses produced by their various colleges and universities. Many experienced registered nurses (RNs) leave these economically less developed countries to the developed countries, thereby aggravating the already weak health systems of the countries they leave (Kingma, 2001, 2007).

The literature shows that in Africa, the emigration of health professionals arises from a combination of pull and push factors (Kirigia, Gbary, Muthuri, Nyoni, & Seddoh, 2006). The push factors, on one hand, refer to undesirable features of the healthcare systems (in source countries), which make people want to move out. The pull factors, on the other hand, relate to attractive conditions present in the health systems of other countries which make people want to work there (Kirigia et al., 2006). According to Stilwell, Zurn, Connell, and Awases (2005), the push factors include weak health systems, civil wars, poor living conditions, lack of professional development opportunities and work overload among others. While the factors, which pull health professionals to developed countries include better remuneration and conditions of work, easy access to technology and opportunities for intellectual growth (Stilwell et al., 2004). Similar factors have been identified

by other researchers as they suggest job stress and dissatisfaction related to patient acuity, lack of new technology, staff shortages, work schedules, poor physician/nurse interactions, perception that the care provided is unsafe, unpredictable work flow/workload, economic instability and poor wages are among the major reasons nurses leave their home countries for abroad (Awases, Nyoni, Gbary, & Chatora, 2003; Groff & Terhaar, 2010).

Umar, Umar, Amina, Strasser, and Ibraheem (2014) reported that approximately 40% of registered nurses in Sierra Leone leave the country to practice nursing abroad. This exodus of nurses they attributed to poor working conditions, poor remuneration, lack of incentives and delayed promotion. In a study of 453 South African nurses, 60% indicated that they would travel overseas if they get the opportunity. Their reasons to migrate included better remuneration and working environment (Ehlers, Oosthuizen, Bezuidenhout, Monareng, & Jooste, 2003).

The International Organisation for Migration (IOM, 2009) noted that Ghana has the highest emigration rates of about 46% for the highly skilled people in Western Africa and it estimated that more than 56% of doctors and 24% of nurses trained in Ghana are working in the UK and the USA (IOM, 2009). Data from the Ghana Nurses and Midwives Council indicate that 71 per cent of nurses leaving Ghana between 2002 and 2005 went to the UK, followed by 22% to the USA (Antwi & Phillips, 2013). The migration of nurses abroad has resulted in a huge loss of highly trained and experienced nurses (Pillinger, 2011). Particularly worrying is that younger nurses have been identified as being more likely to emigrate (Anarfi, Quartey, & Agyei, 2010). This situation is likely to leave the profession with an aged workforce.

E-mail address: [imbofo@gmail.com](mailto:imbofo@gmail.com)<http://dx.doi.org/10.1016/j.ijans.2016.11.001>

2214-1391/© 2016 The Author. Published by Elsevier Ltd.

This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Emigration of key skilled health workers in Ghana has hampered the ability of the health care system to meet the health needs of the people of Ghana (Pillinger, 2011). The health sector of Ghana faces great challenges of which shortage of health professionals is key. The 2012 annual progress report on the implementation of the Ghana Shared Growth Development Agenda revealed that instead of improving upon the nurse-patient ratio, the situation rather worsened from one nurse to 1240 patients in 2011 to one nurse to 2151 patients in 2012 falling far below the projected rate of one nurse to 900 patients (Peacefmonline.com., 2014). This means that nurses have to work longer hours and under more stressful conditions in various hospitals and clinics in Ghana (Africa Health Workforce Africa Health Workforce Observatory, 2010). It is however, worth stating that the inadequate number of nurses is not solely the result of emigration. As is the case of many developing countries, it is also partly due to governments' inability to employ more qualified nurses as a result of financial constraints (Australian Trauma Quality Improvement Program (AusTQIP), 2012).

The Nurses and Midwives Council of Ghana pointed out that the country is not only losing skilled professional staff but it is also losing investments made in educating and training the nurses (Pillinger, 2011). In view of the huge financial and human resource loss suffered by the country as a result of emigration of nurses, the Government of Ghana has instituted measures to stem this tide. "If you want to train in Ghana at a Government sponsored institution as a nurse and then disappear in search of greener pastures abroad, you better have deep pockets" (Sodzi-Tettey, 2010, p. 1). Nurses are now required to pay for the cost of their training if they want to work abroad prior to their five- year mandatory service to the nation. In spite of this precautionary measure, data from the Ghana Nurses and Midwives Council showed that the number of nurses and midwives seeking verification of their qualifications from the Council to enable them to migrate still remain high (Antwi & Phillips, 2013). This high rate of emigration aspirations of Ghanaian nurses is also confirmed in a study by Anarfi et al. (2010). This study identified dissatisfaction with salary and lack of opportunities to upgrade one's skills as some of the reasons nurses would want to emigrate. In the study by Antwi and Phillips (2013), it was suggested that a 10% increase in wages decreased the annual turnover rates of the hospitals studied by 1.0 percentage point among workers aged between 20 and 35 years (Antwi & Phillips, 2013).

In spite of the fact that a number of studies have identified that several factors impact nurses' emigration intentions, none of these studies have examined the influence of workplace violence on nurses' emigration intentions. Meanwhile, workplace violence has been identified as a major problem facing nurses globally including Ghana (AbuAlRub & Al-Asmar, 2014; Al-Omari, 2015; Boafo, Hancock, & Gringart, 2016), and there is evidence from some developed economies that workplace violence influences nurses' intentions to quit the profession and actual quitting behaviour (Gerberich et al., 2004; Sofield & Salmond, 2003). In developing countries such as Ghana where quitting the nursing profession may not be a very realistic option due to lack of job opportunities, emigrating to high income countries seem to be a more rational and attractive choice. It is for this reason that the current paper examines the impact of workplace violence on nurses' emigration intentions.

## 2. Methods

A cross-sectional descriptive questionnaire survey was conducted between September 2013 and April 2014 in 12 hospitals in Ghana comprising of two teaching hospitals, five regional and

five district hospitals. In all, there were three teaching hospitals, nine regional hospitals and over a 100 district hospitals in Ghana. According to the Human Resources Division of the Ghana Health Service, there were a total of 16, 430 qualified practising professional nurses in the country of which 3260 were males and 13,170 were females.

### 2.1. Sampling – hospitals

The current study employed a multi-stage sampling technique. The first stage was the selection of regions where the study was carried out. First, five of the ten administrative regions of Ghana were purposively selected for the study. These were Northern, Ashanti, Greater Accra, Eastern and Volta. These regions were selected in order to achieve representativeness – it ensured that all three major ecological zones, namely, the coastal, forest and savannah zones were represented. It also ensured that the various social, cultural, economic and demographic characteristics of the entire country were captured. These factors can produce differential experiences for nurses in terms of their exposure to violence, and also emigration intentions.

Second, a combination of purposive and simple random techniques was used to select five regional and five district hospitals for the study. Each of the ten regions of Ghana has a regional hospital except the Ashanti Region. Regional hospitals in the selected regions were automatically selected for the study. The regional hospitals serve the entire region and they are usually the largest hospitals in the regions. They take referrals from other hospitals in the region; and where a case is beyond their capabilities, it is referred to a teaching hospital. In the Ashanti region where according to the Ghana Health Service no hospital is designated as a regional hospital, the Suntreso Government Hospital which is located in the Kumasi metropolis was chosen (for the purposes of this study) to represent a regional hospital due to its location and the diversity of the people it serves.

Five district hospitals were randomly selected for the study. Data on the districts in Ghana were obtained from the Ghana Statistical Service (GSS, 2012). The districts in each of the five selected regions were put in five separate boxes. Four research assistants and the first author picked one district from each of the five boxes. This resulted in the selection of five districts. The district hospitals in the selected districts were thus included in the study.

Finally, two out of the three teaching hospitals in the country were selected for the study. To ensure that the sample was representative of the Northern and Southern divide of the country, the Korle Bu Teaching Hospital and Tamale Teaching Hospital located in the Greater Accra Region and the Northern Region respectively were purposively selected.

### 2.2. Sampling – participants

Two main selection criteria was used in selecting participants into the study; (1) one had to be a qualified professional nurse; (2) one should have at least one year post qualification experience. In each hospital, qualified nurses in the selected units/departments were identified with the assistance of ward "in-charges" (managers). Participants were selected through a simple random sampling technique. Selected nurses were given questionnaires to complete at a time convenient to them. The researcher and research assistants collected the questionnaires directly from respondents after completion. Nurses were allowed a maximum of four days to complete the questionnaire. A total of 1021 professional nurses were invited to take part in the survey, of which 685 accepted to participate and 592 returned questionnaires were valid for statistical analyses.

### 2.3. Instrument

Emigration intention was measured with a single dichotomous variable (Anarfi et al., 2010). An adapted version of the health Sector violence questionnaire developed jointly by the International Labour Organisation, Internal Council of Nurses, the World Health Organisation and the Public Services International's (ILO, ICN, WHO, & PSI, 2003) was used in the study reported in the current paper. This questionnaire has been utilized in studies from different countries such as Iran (Esmailpour, Salsali, & Ahmadi, 2011), Jordan (AbuAlRub & Al-Asmar, 2014), Brazil, Lebanon, Portugal, Bulgaria and Thailand (Di Martino, 2002). In Africa, it has been used in South Africa (Steinman, 2003) and Mozambique (Adam, Caldas, Aly, & Capece, 2003).

The adjusted questionnaire was reviewed by five professional nurses for face validity, clarity and sensitivity of items. A single-item scale was used to measure physical, verbal and sexual violence. In view of this, it was impossible to determine their reliabilities using Cronbach's alpha. These items were therefore tested on 20 nurses who were not part of the study prior to the commencement of the study on two occasions with a two-week interval. The test-retest correlation coefficients (Nagy, 2002) for physical and verbal violence were 1.00 and sexual harassment was 0.90. Data were collected between September 2013 and April 2014. Data collection took place between the hours of 12:00 pm and 9:00 pm. This ensured that nurses working on all shifts were sampled. Data were collected by the corresponding author and four trained research assistants.

### 2.4. Data analyses

Statistical Package for Social Sciences (SPSS) version 20 was used to analyze the data. Descriptive statistics were used to summarise the socio-demographic and workplace characteristics of the study participants, and also to ascertain the incidence of workplace violence among the sample. Pearson's chi-square test was conducted to determine whether there were any statistically significant relationships between socio-demographic variables and emigration intentions. It was also used to test the association between workplace violence and emigration intentions. These analyses were two-tailed and conducted at a significance level of  $p < 0.05$ . A predictive model for emigration intentions was constructed using binary logistic regression.

### 2.5. Ethical considerations

The Edith Cowan University Human Research Ethics Committee (HREC) and the Ghana Health Service Ethics Review Committee approved the study. Before the commencement of data collection, permission was also sought from the Medical Superintendent or Hospital Administrator (where appropriate) and the Head of Nursing Services of the hospital after explaining to them the purpose of the study. The aims of the study were explained to all participants and they were assured of confidentiality. Participants were not allowed to write their names or any other information that could be used to trace them on the questionnaire. They were also informed that participation in the study was voluntary and they could withdraw their participation at any point with no penalty. Agreeing to complete the questionnaire (which was anonymous) was taken to be informed consent. The methods used in conducting this study have also been published elsewhere (Boafo, Hancock, & Gringart, 2016).

## 3. Results

### 3.1. Socio-demographic characteristics

The current paper involves 592 valid questionnaires returned by qualified professional nurses from hospitals located in five regions of Ghana. A simple majority of the participants (42.1%) were employed in the Greater Accra Region since it had the highest number of nurse population in Ghana. Data from the Ghana Health Service (2010) showed that the number of nurses working in the region was more than twice the number of nurses working in the Eastern Region. 22.8% of the participants worked in the Eastern Region. More than a third (38.7%) of the participants worked in regional hospitals, and one-third (32.9%) worked in teaching hospitals. In terms of gender composition, approximately 20% of the sample were male nurses and 80% were females. The age of participants ranged from 21 years to 60 years with a mean age of  $31.76 \pm 9.69$ . However, the mean age of male nurses was lower than that of females (Mean =  $28.89 \pm 5.44$  vs. Mean =  $32.51 \pm 10.40$ ). An independent samples t-test revealed this difference in age was statistically significant  $t(378.96) = 5.27$ ,  $p < .01$ , two-tailed. About two-thirds (67.7%) of the participants fell within the age group 21–30 years. With regards to marital status, 47.3% of the participants were married (married includes cohabiting couples) and the remaining were single. A Chi-square test revealed a statistically significant association between marital status and gender,  $\chi^2(N = 590, df = 1) = 20.62$ ,  $p < .01$ . Female nurses were 2.6 times more likely to report being married than their male counterparts. The analyses also revealed that, of nurses aged 21–40 years, 47% of females were married compared to 26.5% of males.

More than half of the sample (61.3%) had Diploma qualifications, and 52.0% of the entire sample were Staff Nurses/Midwives. The number of years of working as nurse ranged from 1–40 years with a mean of  $7.38 \pm 9.53$ . The mean number of years of working for male nurses was  $3.74 \pm 4.12$  and females was  $8.33 \pm 10.28$ . With regards to positions that they occupied in nursing, 85.0% of males had positions below the rank of Nursing Officer compared to 73.2% of females. Marriage was also a distinguishing variable. About thirty percent (29.3%) of the males were married compared to 52.0% of females. Of the entire sample, 90.1% were engaged in direct patient care with 16.9% of the sample working in the outpatient department (OPD), and 35.3% working at the medical and surgical units. Table 1 presents data on the socio-demographic characteristics of the sample.

### 3.2. Incidence and distribution of workplace violence

With regards to the experience of workplace violence, 9% of the sample reported to have experienced physical violence in the 12 months preceding the study; and 12.2% were sexually harassed at the workplace within the same period. More than half (52.7%) were also exposed to verbal abuse at the workplace. The data as displayed in Table 2 show that 20.1% of nurses working in the Greater Accra Region, 9.2% in the Eastern Region, 5.9% in the Volta Region, 5.3% in the Ashanti Region and 3.5% in the Northern Region had been sexually harassed in their workplace in the 12 months prior to the study. Furthermore, 61.7% of nurses in the Greater Accra Region; 50.4% in the Eastern Region and 3.49% in the Northern region experienced verbal abuse (see Boafo et al., 2016 for detailed analysis of workplace violence against the sample).

### 3.3. Emigration intentions

The analyses showed that, 286 out of a total of 585 (48.9%) participants reported having emigration intentions. Further

**Table 1**  
Socio-demographic Characteristics of Participants (N = 592).

| Item Description   | n (%)      |
|--|------------|
| <i>Region</i>  |            |
| Greater Accra  | 249 (42.1) |
| Eastern  | 130 (22.0) |
| Ashanti  | 76 (12.8)  |
| Volta  | 51 (8.6)   |
| Northern   | 86 (14.5)  |
| <i>Hospital type</i>   |            |
| District hospital  | 168 (28.4) |
| Regional hospital  | 229 (38.7) |
| Teaching hospital  | 195 (32.9) |
| <i>Gender</i>  |            |
| Female   | 469 (79.2) |
| Male   | 123 (20.8) |
| <i>Age group</i>   |            |
| 21–30  | 398 (67.7) |
| 31–40  | 98 (16.7)  |
| 41–50  | 37 (6.3)   |
| 51–60  | 55 (9.4)   |
| <i>Marital status</i>  |            |
| Single   | 310 (52.5) |
| Married  | 280 (47.5) |
| <i>Educational attainment</i>  |            |
| Certificate  | 79 (13.4)  |
| Diploma  | 363 (61.7) |
| Bachelor's degree or higher  | 146 (24.8) |
| <i>Units/Department</i>  |            |
| Critical care  | 119 (20.2) |
| Outpatient department  | 100 (17.0) |
| Medical-surgical unit  | 209 (35.5) |
| Special units  | 160 (27.2) |
| <i>Position/Grade</i>  |            |
| Staff Nurse/midwife  | 308 (53.0) |
| Snr. Staff Nurse/midwife   | 132 (22.7) |
| Nursing/Midwifery Officer  | 72 (12.4)  |
| Snr nursing/Midwifery Officer  | 42 (7.2)   |
| Principal nursing/Midwifery Officer  | 28 (4.8)   |
| <i>Have you been verbally abused in your work place in the past 12 months?</i>         |            |
| Yes  | 312 (52.7) |
| No   | 280 (47.3) |
| <i>Have you been sexually harassed in your workplace in the past 12 months?</i>        |            |
| Yes  | 72 (12.2)  |
| No   | 520 (87.8) |
| <i>Have you been physically abused in your workplace in the past 12 months?</i>        |            |
| Yes  | 53 (9.0)   |
| No   | 539 (91.0) |
| <i>Age (min = 21, max = 60, mean = 31.76, SD = 9.69)</i>                               |            |
| <i>Number of years in nursing (min = 1, max = 40, mean = 7.38, SD = 9.53)</i>          |            |
| <i>How concerned are you about violence (min = 1, max = 5, mean = 3.05, SD = 1.51)</i> |            |

Source: Field Survey 2013–2014.

**Table 2**  
Regional Distribution of the Incidence of Workplace Violence.

| Variable information                             | n (%)      |
|--|------------|
| <i>Verbal Abuse: total sample (N = 592)</i>      | 312 (52.9) |
| Greater Accra (N = 248)                          | 153 (61.7) |
| Eastern (N = 129)                                | 65 (50.4)  |
| Volta (N = 51)                                   | 28 (54.9)  |
| Ashanti (N = 76)                                 | 36 (47.4)  |
| Northern (N = 86)                                | 30 (34.9)  |
| <i>Sexual Harassment: total sample (N = 592)</i> | 72 (12.2)  |
| Greater Accra (N = 249)                          | 50 (20.1)  |
| Eastern (N = 130)                                | 12 (9.2)   |
| Volta (N = 51)                                   | 3 (5.9)    |
| Ashanti (N = 76)                                 | 4 (5.3)    |
| Northern (N = 85)                                | 3 (3.5)    |
| <i>Physical Abuse: total sample (N = 592)</i>    | 53 (9.0)   |
| Greater Accra (N = 249)                          | 17 (6.8)   |
| Eastern (N = 130)                                | 12 (9.2)   |
| Volta (N = 51)                                   | 4 (7.8)    |
| Ashanti (N = 76)                                 | 12 (15.8)  |
| Northern (N = 86)                                | 8 (9.3)    |

range of 21–30, 50.0% of those within 31–40, 21.6% of those within 41–50 and 18.2% of those within 51–60 years had intentions of travelling overseas to work as nurses. Marital status also appeared to exert some influence on emigration intentions of nurses. Chi square test showed that 58.1% of nurses who were single had intentions of emigrating compared to 38.5% of those who were married;  $\chi^2$  (df = 1, N = 583) = 22.27,  $p < .01$ .

These results can be explained by the fact that: (1) young nurses are more likely to be unmarried; (2) unmarried nurses may have less family commitments which makes it easier for them to travel and; (3) males are culturally permitted to emigrate more than females within the Ghanaian cultural context. Among married couples, it is more permissible for the male partner to leave the family than for the woman to do so.

In Ghana, nurses below the rank of Nursing Officer are classified as junior nurses and those from the rank of a Nursing Officer and above are classified senior nurses. A statistically significant association was found between position (junior/senior nurse) and emigration intentions  $\chi^2$  (2, N = 576) = 27.41,  $p < 0.01$ . The results showed that 55.3% of junior nurses and 30.3% of senior nurses had intentions of emigrating. Computation of the odds ratio showed that junior nurses were 2.8 times more likely to express emigration intentions (95% CI: 1.91–4.29,  $p < .01$ ). This difference in position and intention to travel abroad may be explained by the fact that more males had such intentions, and that larger proportion of males were junior nurses; hence the association between age and emigration intentions. It could also be that nurses learn to adapt to the conditions of work as they work and longer and age. In other words, they learn to adapt as they gain more experience. Another explanation could be the higher exposure of junior nurses to workplace violence (see Boafo et al., 2016).

The prevalence of emigration intentions was also analysed across the different hospital types included in the study. A statistically significant association was found between hospital type and intention to emigrate  $\chi^2$  (df = 2, N = 585) = 8.54,  $p = 0.01$ . It was found that, out of the total of 164 nurses sampled from district hospitals, 74 (45.4%) had emigration intentions. Whereas 56.4% and 43.1% of nurses working in the regional and teaching hospitals respectively, reported having emigration intentions. International migration of health care professionals including nurses is motivated by a complex number of factors (Kingma, 2007). The differences in the emigration intentions among nurses in the different types of hospitals may differences in exposure to emigration opportunities, (e.g. nurses in regional hospitals may have increased

examination of the data showed that 46.3% of the female nurses and 58.5% of male nurses had intentions of emigrating. Chi-square test showed that this gender difference was statistically significant  $\chi^2$  (1, N = 585) = 5.80,  $p = .02$ . There was also a statistically significant association between age and intention to travel abroad. Younger nurses were more likely to have the intention of travelling abroad to work as nurses ( $\chi^2 = 39.176$ , df = 3, N = 581,  $p < .01$ ). The analyses showed that 55.8% of those within the age



access to travel/emigration and recruitment agents by virtue of them working in the cities), working conditions and environment.

Since the focus of the current paper is on workplace violence, a series of chi square tests were performed to investigate the relationship between workplace violence and emigration intentions. The analyses revealed a statistically significant association between exposure to workplace physical violence and emigration intentions  $\chi^2(df = 1, N = 585) = 6.86, p = .01$ . Computation of the odds ratio showed that nurses' who were exposed to physical violence were 2.1 times more likely to have emigration intentions than those who did not experience such violence. Furthermore, there was a statistically significant association between the experience of workplace verbal abuse and emigration intentions  $\chi^2(df = 1, N = 583) = 14.42, p < .01$ . The odds ratio showed that nurses who were verbally abused at the workplace were 1.8 times more likely to have the intention to emigrate.

In order to determine the possible factors that contribute to emigration intentions, direct binary logistic regression was performed. The overall model was statistically significant  $X^2(df = 9, N = 592) = 80.35, p < 0.01$ . The model explained between 13.2% (Cox & Snell R square) and 17.6% of the variance in emigration intentions of nurses, and correctly classified 50.6% of cases. The strongest predictor of emigration intentions was the experience of sexual harassment (OR = 2.36, 95% CI: 1.28–4.34,  $p = 0.01$ ). The model also revealed that nurses who reported to have been abused verbally in the workplace were more likely than those who have not been abused to have intentions of emigrating (OR = 1.62, CI: 1.11–2.36,  $p < .05$ ). Although gender was not statistically significantly associated with emigration intentions as per the model, marital status was a statistically significant predictor of emigration intentions with participants who were married being approximately 67.4% less likely to have such intentions. Age was negatively associated with intentions to travel abroad (OR = .97, 95% CI: .94–.99,  $p = 0.01$ ). Position within the nursing profession was not a significant predictor of intention to emigrate. The Table 3 below provides more details on the model.

### 3.4. Discussion and conclusion

Ghana's healthcare workers migrate for several reasons including low rates of pay, low job satisfaction, long working hours and lack of opportunities for professional development (Anarfi et al., 2010; International Organisation for Migration, 2010; Pillinger, 2011). The studies by Pillinger (2011) and Anarfi et al. (2010) reported that over half of nurses in their samples had emigration intentions. In-country migration, (rural to urban) is also known to be influenced by similar factors (Adzei & Atinga, 2012). Migration is largely seen as a vehicle to build a better future (Pillinger, 2011). In spite of the gains that may be derived, the emigration of healthcare workers including nurses has particularly serious economic and health implications for the country (Africa Health Workforce Observatory, 2010).

The current paper examined the influence of workplace violence on emigration intentions of Ghanaian nurses. In the current paper, it was found that more than half of the entire sample had experienced verbal abuse. Remarkably, the Greater Accra Region had the highest incidence of verbal abuse (61.7%). This may be explained by the urbanised nature of the region, overcrowding in its hospitals, inadequate staff and poor infrastructure leading to frustration and dissatisfaction of patients and their relatives. This in turn increases their predisposition to vent their (patients and their relatives) frustration and dissatisfaction through verbal abuse. Patients and their relatives have, indeed, been identified as the largest group of persons responsible for workplace violence against nurses (AbuAlRub & Al-Asmar, 2014; Gacki-Smith et al., 2009; Hayes et al., 2006; Magnavita & Heponiemi, 2011; Talas, Kocaöz, & Akgüç, 2011). The results further showed that nurses were concerned about workplace violence. This finding further strengthen the need for measures to be put in place to combat the problem.

Congruent with previous studies, the current paper found that 48.9% of the participants had the intention of travelling abroad to work as nurses. Consistent with the findings of Anarfi et al.

**Table 3**  
Predicting Nurses' Emigration Intentions – Logistic Regression.

| Variable          | Coefficient | S.E | Wald | df | p-value | Odds Ratio | 95% C.I.  |
|-------------------|-------------|-----|------|----|---------|------------|-----------|
| Age               | -.03        | .01 | 6.97 | 1  | .008    | .97        | .94–.99   |
| Gender            |             |     |      |    |         |            |           |
| Female            | reference   | –   | –    | –  | –       | –          | –         |
| Male              | .35         | .23 | 2.39 | 1  | .12     | 1.42       | .91–2.22  |
| Marital Status    |             |     |      |    |         |            |           |
| Single            | reference   | –   | –    | –  | –       | –          | –         |
| Married           | -.40        | .19 | 4.18 | 1  | .041    | .67        | .46–.98   |
| Position          |             |     |      |    |         |            |           |
| Junior Nurse      | reference   | –   | –    | –  | –       | –          | –         |
| Senior Nurse      | -.48        | .27 | 3.13 | 1  | .08     | .62        | .36–1.05  |
| Hospital type     |             |     |      |    |         |            |           |
| District hospital | Reference   | –   | –    | –  | –       | –          | –         |
| Regional hospital | .47         | .23 | 4.22 | 1  | .040    | 1.60       | 1.02–2.49 |
| Teaching hospital | -.06        | .24 | .05  | 1  | .82     | .95        | .59–1.51  |
| Verbal abuse      |             |     |      |    |         |            |           |
| Not abused        | reference   | –   | –    | –  | –       | –          | –         |
| Abused            | .48         | .19 | 6.25 | 1  | .012    | 1.62       | 1.11–2.36 |
| Sexual Harassment |             |     |      |    |         |            |           |
| Not harassed      | reference   | –   | –    | –  | –       | –          | –         |
| Harassed          | .86         | .31 | 7.54 | 1  | .006    | 2.36       | 1.28–4.34 |
| Physical abuse    |             |     |      |    |         |            |           |
| Not Abused        | reference   | –   | –    | –  | –       | –          | –         |
| Abused            | .46         | .33 | 1.92 | 1  | .17     | 1.58       | .83–3.03  |
| Constant          | .71         | .44 | 2.62 | 1  | .11     | 2.03       |           |

Source: Field Survey 2013–2014.

(2010), chi-square analyses showed a statistically significant association between gender and intention to travel abroad. Male nurses were more likely to have emigration intentions than females. Such association has generally been attributed to gender constructions and traditional gender roles, which constrain women from migrating (United Nations, n.d.). However, logistic regression showed that this association was not statistically significant. This means that when other factors are controlled for, male and female nurses have equal probability of having emigration intentions. Consistent with the migration literature from sub-Saharan Africa (Camlin, Snow, & Hosegood, 2014; Gugler & Ludwar-Ene, 1995; Nowak, 2009), age and marital status were found to be significant predictors of emigration intentions. Younger nurses were more likely to have emigration intentions than older nurses. This may be because older nurses might have able to adjust to the working conditions in Ghana, or they may have given up on their migration ambitions as they age. Unmarried nurses' higher likelihood of emigration intentions may also explain the fact that people who are not married have relatively weak familial commitments, which usually restrain married men and women from migrating (Camlin, Snow, & Hosegood, 2014; Gugler & Ludwar-Ene, 1995).

One remarkable finding of the current paper is the linkage between workplace violence and emigration intentions. Similar to other studies, which have reported associations between workplace violence, turnover and turnover intentions (Gerberich et al., 2004; Morrell, 2005; Sherman et al., 2008; Sofield & Salmond, 2003) the current paper found that nurses who suffered workplace violence, specifically verbal abuse and sexual harassment were more likely to report emigration intentions. The association between verbal abuse and migration intention could be explained by the fact that most of these incidents are taken to be part of the job and as such are not investigated by management. Abusers are left go without any consequences (Boafo et al., 2016; Natan, Hanukayev, & Fares, 2011). The persistence of such abuse may, however, lead to diminished job satisfaction (Teymourzadeh, Rashidian, Arab, Akbari-Sari, & Hakimzadeh, 2014), which may in turn lead to a desire to find better working conditions in other countries or quitting the nursing profession entirely (Gerberich et al., 2004; Pillinger, 2011; Sofield & Salmond, 2003).

Travelling to work abroad cannot be done easily due to financial and immigration requirements. Moreover, the government of Ghana have put some measures in place to de-motivate health professionals trained in public institutions from migrating to work outside the country (Sodzi-Tettey, 2010). In view of this, nurses' intentions to emigrate may not necessarily translate into actual behaviour. However, the association between emigration intentions and workplace violence revealed in the current paper is an issue that should be of interest to policy makers and health care managers. Indeed a previous paper has showed that workplace violence is a problem facing nurses in Ghana, and it may give rise to many health and behavioural consequences (Boafo et al., 2016). It is, therefore, imperative that pragmatic steps are taken to combat this problem.

### Conflict of interest

None.

### Acknowledgments

The author acknowledges financial support from Edith Cowan University and International Postgraduate Research Scholarship (IPRS) which made the execution of this research project possible.

### References

- AbuAlRub, R. F., & Al-Asmar, A. H. (2014). Psychological violence in the workplace among Jordanian hospital nurses. *Journal of Transcultural Nursing*, 25(1), 6–14.
- Adam, Y., Caldas, A., Aly, Z., & Capece, S. P. (2003). Violence Against Health Personnel in some Health Care Units In Maputo City Joint Programme on Workplace Violence in the Health Sector. Geneva.
- Adzei, F. A., & Atinga, R. A. (2012). Motivation and retention of health workers in Ghana's district hospitals: addressing the critical issues. *Journal of health organization and management*, 26(4), 467–485.
- Africa Health Workforce Observatory (2010). *Human resources for health country profile: Ghana*. Geneva: WHO.
- Al-Omari, H. (2015). Physical and verbal workplace violence against nurses in Jordan. *International Nursing Review*, 62(1), 111–118. <http://dx.doi.org/10.1111/inr.12170>.
- Anarfi, J., Quartey, P., & Agyei, J. (2010). Key determinants of migration among health professionals in Ghana. In *Development research center on migration, globalization and poverty* (pp. 3–18).
- Antwi, J., & Phillips, D. C. (2013). Wages and health worker retention: Evidence from public sector wage reforms in Ghana. *Journal of Development Economics*, 102, 101–115. <http://dx.doi.org/10.1016/j.jdeveco.2012.10.004>.
- Australian Trauma Quality Improvement Program (AusTQIP) (2012). *Response to the Australian commission for safety and quality in health care on the 'Australian Safety and Quality Goals for Health Care-Consultation Paper'*. AU: National Trauma Research Institute.
- Awases, M., Nyoni, J., Gbary, A., & Chatora, R. S. (2003). *Migration of health professionals in six countries: A synthesis report*. Brazzaville.
- Boafo, I. M., Hancock, P., & Gringart, E. (2016). Sources, incidence and effects of non-physical workplace violence against nurses in Ghana. *Nursing Open*, 3(2), 99–109. <http://dx.doi.org/10.1002/nop.243>.
- Camlin, C. S., Snow, R. C., & Hosegood, V. (2014). Gendered patterns of migration in rural South Africa. *Population, Space and Place*, 20(6), 528–551. <http://dx.doi.org/10.1002/psp.1794>.
- Di Martino, V. (2002). Workplace violence in the health sector. Country case studies Brazil, Bulgaria, Lebanon, Portugal, South Africa, Thailand and an additional Australian study. Ginebra: Organización Internacional del Trabajo.
- Ehlers, V. J., Oosthuizen, M. J., Bezuidenhout, M. C., Monareng, L. V., & Jooste, K. (2003). Post-basic nursing students' perceptions of the emigration of nurses from the Republic of South Africa: research. 8(4), p.24–37. [http://reference.sabinet.co.za/webx/access/electronic\\_journals/health/health\\_v8\\_n4\\_a4.pdf](http://reference.sabinet.co.za/webx/access/electronic_journals/health/health_v8_n4_a4.pdf).
- Esmailpour, M., Salsali, M., & Ahmadi, F. (2011). Workplace violence against Iranian nurses working in emergency departments. *International Nursing Review*, 58(1), 130–137. <http://dx.doi.org/10.1111/j.1466-7657.2010.00834.x>.
- Gacki-Smith, J., Juarez, A. M., Boyett, L., Homeyer, C., Robinson, L., & MacLean, S. L. (2009). Violence against nurses working in US emergency departments. *Journal of Nursing Administration*, 39(7/8), 340–349.
- Gerberich, S. G., Church, T. R., McGovern, P. M., Hansen, H. E., Nachreiner, N. M., Geisser, M. S., & Watt, G. D. (2004). An epidemiological study of the magnitude and consequences of work related violence: the Minnesota Nurses' Study. *Occupational and Environmental Medicine*, 61(6), 495–503.
- Ghana Health Service (2010). *The health sector in Ghana: Facts and figures*. Accra: Ghana Health Service.
- Groff, P. L., & Terhaar, M. (2010). Using Maslow's pyramid and the national database of nursing quality indicators (TM) to attain a healthier work environment. *Online Journal of Issues in Nursing*, 16(1), A1.
- GSS (2012). *2010 population and housing census final results*. Accra: Ghana Statistical Service.
- Gugler, J., & Ludwar-Ene, G. (1995). Gender and migration in Africa south of the Sahara. *The migration experience in Africa*, 257, 68.
- Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., & Stone, P. W. (2006). Nurse turnover: a literature review. *International Journal of Nursing Studies*, 43(2), 237–263.
- ILO ICN WHO & PSI (2003). *Workplace Violence in the Health Sector Country Case Study – Questionnaire*. Geneva.
- International Organisation for Migration (2009). *Migration in Ghana: A country profile, 2009*. Geneva: IOM.
- International Organisation for Migration (2010). *Roundtable on mobility of health professionals, report of roundtable Brussels, 27 April, 2010*. Geneva: IOM.
- Kingma, M. (2001). Nursing migration: global treasure hunt or disaster-in-the-making? *Nursing Inquiry*, 8(4), 205–212.
- Kingma, M. (2007). Nurses on the move: A global overview. *Health Services Research*, 42(3p2), 1281–1298.
- Kirigia, J. M., Gbary, A. R., Muthuri, L. K., Nyoni, J., & Seddoh, A. (2006). The cost of health professionals' brain drain in Kenya. *BMC Health Services Research*, 6(1), 89.
- Magnavita, N., & Heponiemi, T. (2011). Workplace violence against nursing students and nurses: an Italian experience. *Journal of Nursing Scholarship*, 43(2), 203–210. <http://dx.doi.org/10.1111/j.1547-5069.2011.01392.x>.
- Morrell, K. (2005). Towards a typology of nursing turnover: the role of shocks in nurses' decisions to leave. *Journal of Advanced Nursing*, 49(3), 315–322.
- Nagy, M. S. (2002). Using a single-item approach to measure facet job satisfaction. *Journal of Occupational and Organizational Psychology*, 75(1), 77–86. <http://dx.doi.org/10.1348/096317902167658>.

- Natan, M. B., Hanukayev, A., & Fares, S. (2011). Factors affecting Israeli nurses' reports of violence perpetrated against them in the workplace: A test of the theory of planned behaviour. *International Journal of Nursing Practice*, 17(2), 141–150. <http://dx.doi.org/10.1111/j.1440-172X.2011.01919.x>.
- Nowak, J. (2009). Gendered perceptions of migration among skilled female Ghanaian nurses. *Gender & Development*, 17(2), 269–280. <http://dx.doi.org/10.1080/13552070903009742>.
- Peacefmonline.com. (2014). Ghana's Doctor-To-Patient Ratio Worsens Retrieved 3/3, 2015, from <<http://news.peacefmonline.com/pages/health/201406/205105.php>>.
- Pillinger, J. (2011). *Quality health care and workers on the move: Ghana National Report*. Ferney Voltaire, France: Public Services International, International Migration and Women Health and Social Care Workers Programme.
- Sherman, M. F., Gershon, R. R., Samar, S. M., Pearson, J. M., Canton, A. N., & Damsky, M. R. (2008). Safety factors predictive of job satisfaction and job retention among home healthcare aides. *Journal of Occupational and Environmental Medicine*, 50(12), 1430–1441.
- Sodzi-Tettey, S. (2010). Opportunity for Ghana to train more Nurses for her Needs and for Export. Retrieved 27/02, 2015, from <<http://www.modernghana.com/news/278181/1/opportunity-for-ghana-to-train-more-nurses-for-her.html>>.
- Sofield, L., & Salmond, S. W. (2003). Workplace violence: A focus on verbal abuse and intent to leave the organization. *Orthopaedic Nursing*, 22(4), 274–283.
- Steinman, S. (2003). *Workplace Violence In The Health Sector: Country Case Study: South Africa Workplace Violence In The Health Sector*. Geneva.
- Stilwell, B., Diallo, K., Zurn, P., Vujicic, M., Adams, O., & Dal Poz, M. (2004). Migration of health-care workers from developing countries: strategic approaches to its management. *Bulletin of the World Health Organization*, 82(8), 595–600.
- Stilwell, B., Zurn, P., Connell, J., & Awases, M. (2005). *The migration of health workers: An overview*. Geneva: World Health Organization.
- Talas, M. S., Kocaöz, S., & Akgüç, S. (2011). A survey of violence against staff working in the emergency department in Ankara, Turkey. *Asian Nursing Research*, 5(4), 197–203.
- Teymourzadeh, E., Rashidian, A., Arab, M., Akbari-Sari, A., & Hakimzadeh, S. M. (2014). Nurses exposure to workplace violence in a large teaching hospital in Iran. *International Journal of Health Policy and Management*, 3(6), 301–305. <http://dx.doi.org/10.15171/ijhpm.2014.98>.
- Umar, N. J., Umar, A., Amina, G. U., Strasser, K. N., & Ibraheem, M. A. (2014). Migration and retention of registered nurses – A case study of freetown. *IOSR Journal of Nursing and Health Science*, 3(2), 18–26.
- United Nations. (n.d.). Women and International Migration. Retrieved 31/08, 2015, from <[http://www.un.org/esa/population/meetings/thirdcoord2004/P01\\_DAW.pdf](http://www.un.org/esa/population/meetings/thirdcoord2004/P01_DAW.pdf)>.